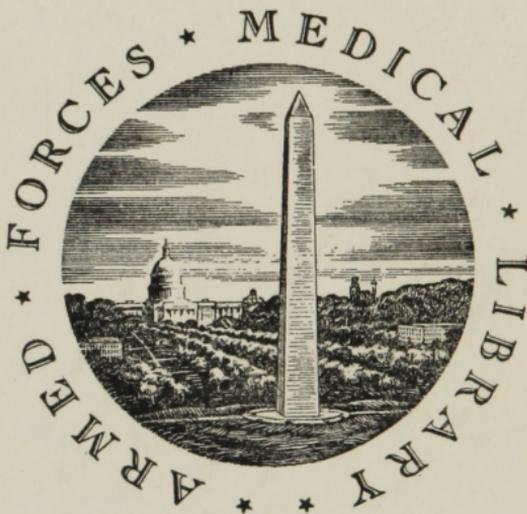


UNITED STATES OF AMERICA



FOUNDED 1836

WASHINGTON, D.C.

In, ^o *Merr*
394

A
DESCRIPTION

OF THE

Malignant, Infectious Fever

PREVAILING AT PRESENT IN PHILADELPHIA;

WITH

AN ACCOUNT OF THE MEANS TO PREVENT
INFECTION, AND THE REMEDIES AND METHOD
OF TREATMENT, WHICH HAVE BEEN
FOUND MOST SUCCESSFUL.

BY WILLIAM CURRIE,
Fellow of the College of Physicians of Philadelphia.

PHILADELPHIA.

PRINTED BY T. DOBSON, No. 41, SOUTH SE-
COND-STREET.

MDCCXCIII.



394

111

NOTICE

TO THE PUBLIC

OF THE

PROCEEDINGS

OF THE

COURT

OF

COMMONS

IN

DESCRIPTION, &c.

* **T**HE Fever at present prevailing in the city of Philadelphia (which is highly infectious and malignant) generally begins with, and may be distinguished from every other species or form of fever, by the following symptoms, viz.

THE

* The Influenza made its appearance here the last week in July, and the first case of the Malignant Fever that has been observed was about the 3d of August, in Water-street, between Arch and Race-streets, where it has since raged with greater violence, and occasioned a much greater proportion of mortality than in any other part of the city.

THE patient first complains of weariness and weakness, which, in a few hours, is succeeded by a sense of chilliness, and an oppressive dull pain and giddiness in the head, an oppressive weight and stricture about the breast, particularly at the region of the heart, as if the space was too narrow for its pulsations. The breathing is performed with quickness and uneasiness.

THESE symptoms in most cases, are soon succeeded by a frequent propensity to puke, and this by a quick, full, but soft and irregular pulse; great heat about the head, neck, and breast; the skin generally hot and moist about the neck and forehead, but dry, and but little increase of heat about the feet and legs.*

IF, to these symptoms, we add an extraordinary prostration of strength or sudden debility in the animal functions of the body, we have a perfect description of the fever under consideration, from the first day of its attack to the third of its progress.

WHEN

* The violence of the symptoms generally remit every morning.

WHEN no amendment takes place by the 3d or 4th day, most of the recited symptoms become more distressing and alarming, with the pulse low and sunk. Frequent vomiting of matter resembling coffee grounds in colour and consistence, generally occurs before the disease terminates, when it proves mortal, together with a cadaverous appearance of the countenance, succeeded by a deep yellow or leaden colour of the skin and nails; the eyes become suffused with blood, and the countenance appears like that of one strangled; but no signs of jaundice appear, either in the urine or feces. In some cases, a profuse discharge of blood from the nose, concludes the catastrophe---A hiccup is a very frequent but not a constant symptom, nor does vomiting always occur. The tongue is seldom very foul or dry, nor does the patient always crave drink. His intellects, though always confused, are seldom so much disordered as to amount to a delirium---Subsultus tendinum are very rare.

WHEN the disease terminates favourably, the symptoms generally abate on the third or fourth day, accompanied by a profuse sweat. When it ends fatally, it is generally between the fifth and eighth day, though some have survived the tenth, and died afterwards.

THE characteristic or leading symptoms of the disease, as has already been observed, are sudden debility in the voluntary powers, oppressive pain, giddiness and sense of fullness and distention in the vessels of the forepart of the head, and an oppressive weight, or an inexpressible sensation of tightness about the heart and lungs, accompanied with excruciating anguish and restlessness.

THIS fever, like all other varieties of putrid fever, arises from, and is produced by specific contagion, and may be communicated from those labouring under the disease, to persons in the most perfect state of health.

How the disease was introduced into the city, whether imported from some other country, in consequence of the contagion adhering to goods or to the apparel of diseased persons, which is the most common source from whence infectious diseases are communicated, or generated in the low and filthy apartments of some of the inhabitants of Water-street, can only be determined by a collection and faithful statement of facts, and must be left for future investigation.

IT ought, however, to afford us much consolation, when we are assured, (and on this assurance we may rely with the most perfect security) that the disease under consideration, though certainly infectious is nevertheless only communicable under particular circumstances. Those circumstances removed, no infection can possibly take place.

To suppose that the air in the streets can be contaminated by the contagion so as to communicate the disease through that medium, is
contrary

contrary to, and is contradicted by, the observations and experience of the learned of the faculty of every age and country; and any apprehension of an infectious disease from that source, can only be excused in those who have not had suitable opportunities of better information.

BURNING heaps of odorous and noisom substances in the streets is therefore not only useless, but injurious, as it not only consumes or changes the quality of the pure or vital air of the atmosphere, but conveys into it from the burning materials, a proportionable quantity of deleterious gas, commonly called fixed air.

PEOPLE in walking the streets, are by no means in any danger of infection, as the miasmata, or contagious exhalations from the bodies of the diseased have never been known to be conveyed by the air many feet beyond the chamber of the sick, except by means of clothes or other porous substances which have

been in contact with, or very near to, the body of one labouring under the disease.

THE principal, and perhaps the only circumstances which render the present fever communicable, if analogy and past experience are to have any weight, are the following, viz. Confinement for any length of time in the bed-chamber of the sick, especially when the apartment is not large, and freely ventilated—coming in immediate contact with the patient, his body, or bed-clothes, or those of the nurse or other attendants before they have been for some time exposed to the action of the open air, or by receiving the breath, or the scent of the several excretions of the sick.*

IF people rigorously shun the above circumstances, pay a strict attention to cleanliness;

* Exposure of the apparel of the infected to the open air some days, and afterwards baking it in an oven for a few hours effectually removes any risk of disease from that source.

ness; to constant ventilation of their own as well as the apartments of the sick; take moderate and frequent exercise in the open air when dry and serene; make moderate use of relishing aliment copiously seasoned with salt and culinary spices, and drink wine or other strong liquors more liberally than customary; avoiding intemperance of every description; but above all, the monstrous and abominable vice of getting drunk—I venture to pronounce with the most positive confidence, that the disease will not, cannot spread.

WITH respect to the various expedients made use of by all classes to preserve themselves from infection, such as camphor bags, amulets of dried frogs, tarred ropes, sponge dipped in the vinegar of the four thieves, the salt of spices (as it is vulgarly called) the smoaking of segars—they are productive of more evil than good, because they continually attract the mind to one melancholy object, and serve to keep alive fearful apprehensions,
 which

which might otherwise be diverted by other objects and a succession of new ideas.

THE best, and I believe I may say the only neutralizer or corrector of contagion yet discovered, is the pure vital air of the atmosphere. The putrid noxious effluvia confined in tombs and vaults (than which few things are more suddenly fatal to life) has been rendered perfectly innocent by the copious admixture of vital air, or that portion of the atmosphere which serves the purpose of respiration and combustion.

THIS salubrious æriform fluid may therefore be most usefully employed for restoring to health the unfortunate sufferers under the present malignant disorder.

SICK rooms may at least be purified and rendered much more comfortable to the patient and safe to the attendants by frequently deflagrating nitre on burning charcoal in different parts of the apartment: this is known
to

to evolve considerable quantities of this vivifying air. Pouring vinegar upon a hot iron produces the same effect in an inferior degree, as it undergoes a partial decomposition, and a quantity of vital air, one of its constituent parts, is thereby set at liberty. The contaminated air may be also removed by frequently kindling fires in the chimney of the chamber of the sick; the air thus rarefied in the chimney ascends, being compressed and followed by that in the chamber, and the place, which the contaminated air has left, is immediately occupied by a fresh supply of that which is pure.

WHITE-WASHING the walls of the chamber has been found by the late humane and benevolent Mr. Howard, highly conducive to the removal of infection, and is strongly recommended by Dr. Blane.

ALL kinds of plants in a state of vegetation furnish more or less pure air, at the same time that they absorb and correct that which is contaminated.

contaminated. Vessels of fresh water therefore with cotton steeped in them, and the seed of pepper grass sown upon it, which will immediately vegetate, may with propriety be placed in different parts of the chamber, with this caution that they be removed during the night, and the water renewed every morning.

MANY melancholy examples of a fever, with a complexion and features, nearly resembling the one under consideration occurred during the late war, between United America and Great-Britain, in the military hospitals and prison ships.

THAT a contagious fever may be generated in any situation where fresh air is excluded, and cleanliness neglected; especially in the winter season; and that the contagion or miasmata so generated, is rendered active by the summer's heat in such confined and filthy places, is now generally admitted by the most accurate observers: The account given of
the

the periodical rise, progress and decline, of the plague at Aleppo by Dr. Ruffel, renders this a matter of certainty. The miasma or contagion thus generated, is propagated and spread by infection.

IT is also generally admitted, that the contagion by which putrid fevers are produced, is not like that of many other diseases permanent and constantly existing, but in the circumstances just related, it is occasionally generated and propagated. At the same time it is a rational inference to suppose, that all fevers arising in such circumstances are of the same specific nature, however they may differ in the number and violence of their symptoms, and that such difference may be imputed to the circumstances of climate, season, soil and constitution, concurring with the contagion and modifying its force.

How far the fever at present prevalent here may be combined with, or modified by the contagion of the influenza, which has also
for

for some time past, been very epidemic, is a question that I shall not at present enter into the discussion of. *

The

* A physician under the signature of Quæstor Veritatis, in the Federal Gazette of the 28th of August, asserts that the present malignant fever is only a modification of the influenza, and has attempted to support his opinion in the following manner: “ That the long continued heat and drought have relaxed, debilitated and disposed the bodies of persons who lead indolent lives, are employed in sedentary occupations, or accustomed to intemperance, to fevers attended with symptoms of putrefaction must be obvious to every person acquainted with the animal œconomy, and that diseases of the most inflammatory nature will, in their progress, produce the most unequivocal symptoms of putrefaction, or a gangrenous tendency of the solids under such circumstances, is well known to every person conversant with the records of medicine.

It is under such circumstances that the small pox and measles become highly putrid and malignant, and it is in persons of this description, that the scarlatina anginosa assumes the form and features of the cynanche maligna.

It is however said, that as a greater proportion of people have died in water-street, than in any other street of the city, there must be some local source of specific contagion. But this may be explained more rationally from there being a less portion of pure air there than in any other parts of the city, owing to the situation of the houses on the west side,
being

The following method of cure has been hitherto found more successful than any other, which

2

being half buried under ground, the number of sailor taverns and huxter's shops, which are receptacles of all kinds of filth, dirt and nastiness, and which from their situation are excluded from the benefit of free ventilation, &c. Air deprived of free circulation and frequently respired, is robbed of its vivifying principle, for want of which life can not be supported, nor fires kindled."

If upon a dispassionate enquiry, it shall be found that those affected with typhous and malignant symptoms, have communicated the disease to those residing in other parts of the city, who came to visit them, or being themselves removed to other parts, communicated it to their attendants, who were not previously affected with the typhous diathesis, or had been previously affected with the influenza or other disease, the opinion of this anonymous writer will be completely subverted. But on the contrary, if it shall appear, that those circumstanced as above mentioned, who have not had the influenza, have been attacked by it soon after intercourse with those labouring under the symptoms of malignant fever, it is a strong presumption in favour of his opinion. This is a question which can only be decided by a collection and accurate statement of facts, and till such collection and statement is made, every physician whose object is truth, will suspend his judgment.

From the scrutiny which has been made by different physicians, and particularly by Dr. Hutchinson, the physician of the port, there has not been found evidence sufficient to afford any

wards or downwards, succeeded next day by a mild purgative occasionally repeated, a sudorific anodyne at night, with copious dilution, for the purpose of promoting a free perspiration, generally affords some alleviation of the most distressing symptoms. The patient, if his stomach will admit and retain it, may also take a spoonful
of

in a slower and safer manner. Some of my medical friends have informed me, that they have found calomel answer this purpose better than any other purgative.

Some patients in the first stage of the disease have found more relief from wearing a linen turban on their heads (previously shaved) frequently wet with cold vinegar; and from affusions of cold water over their heads and shoulders, than from warm fomentations.

So soon as the activity of the pulse, heat of the skin, and præcordial anxiety are moderated, the cortex and elixir of virioli are the most certain remedies that can be employed, with the addition of wine, especially claret, in such quantities as to prevent the vital powers from sinking too much.

Should the vigour of the system, the anxiety and restlessness suddenly increase, immediate recourse should be had to blisters, to the unlimited use of strong Madeira wine, volatile salts, and every other cordial and exciting power that can be devised, provided there be no hæmorrhagy.

of camphorated vinegar, or a solution of salt of tartar in lime juice, in a draught of barley water or gruel, every two hours, rather cold than warm, and should drink copiously of lime juice, or tamarind beverage, to encourage perspiration ; his feet and hands being at the same time frequently immersed in, or fomented with, clothes dipped in cool vinegar and water, and wiped very dry with a warm cloth ; his body and bed linen to be changed regularly twice a day, previously immersed in vinegar, and afterwards gradually dried, so as to be perfectly free from moisture. His bed to be in the middle of the floor, without curtains, all the windows, as well as the doors of the chamber to be kept open, and where practicable, he should be removed to the high lands in the country, upon the first attack of the disease. Perhaps lying in a tent placed in a dry verdant field would be preferable to the most spacious chamber.

So soon as the violent determination to the head is diminished, which may be known by
the

the abatement in the action of the carotid and temporal arteries, the patient may take every night at bed time, half a grain of tartar emetic, mixed in a peppermint or cinnamon draught, with 25 drops of laudanum, and 2 drachms or 3 of acetated ammonia, increasing or diminishing the proportion of the laudanum, according to circumstances. This composition has generally the most pleasing effect in procuring rest, and promoting perspiration, particularly when the impetus of the blood in the vessels of the head is moderate.

WHEN the propensity to puke in the early period of the disease is urgent, it may frequently be relieved by giving six or eight grains of calomel* combined with one or two grains of solid opium (made into a bolus with common syrup) every three or four hours, till it produces a copious discharge from the intestines; repeating the anodyne in an effervescent neutral mixture at bed time.

IF

* For this method of exhibiting mercurial purgatives I am indebted to the writings of Dr. Clarke of New-Castle.

IF notwithstanding the use of these means the disease does not give way, but on the contrary the patient's strength evidently declines, or sooner if the activity of the pulse is considerably reduced, recourse should be had to blisters; one to be applied between the shoulders, and two to the legs. The sudorific anodyne should also be given at night, and the red bark should be exhibited in as large doses as the stomach can be made to retain it, and in substance if possible. Wine should also now be exhibited (and not before) beginning with a small quantity, and gradually increasing it as it is found to agree. When it aggravates the pain in the head, and distressing anguish at the breast, it should be diminished or discontinued for a time.*

IF the pulse becomes feeble, or the throbbing of the arteries in the neck and temples, languid, the stomach irritable, and disposed to reject every thing, a cataplasm of mustard and vinegar should be applied warm to the
stomach.

* The elixir of vitriol has been exhibited in some cases from the beginning, with evident benefit.

stomach and feet, and occasionally repeated. At the same time the bark and wine, or where wine disagrees, the bark mixed with a strong peppermint julep, with the addition of a small quantity of thebaic tincture should be almost constantly given*.

WINE and volatiles, as well as large doses of opium, given at the commencement of the disease, have proved highly injurious, and appear, in some instances, to have occasioned, or at least to have increased the profuse hæmorrhages from the nose. But elixir of vitriol has produced more salutary effects.

WINE and volatiles under such circumstances, appear to render the action of the system disproportioned to its state of power, for there must be a certain degree of strength, to bear the action excited by stimulating and cordial medicines, and regimen: For nothing is more pernicious, or even fatal, than that any part or function should be forced to make exertions incompatible.

* When the bark disagrees, the best substitute is elixir vitriol given to the quantity of 20 drops in a cold infusion of the bark every hour.

incompatible with its strength; and there is the more danger of ill-timed remedies in the present fever, as with the state of weakness there is conjoined a state of excessive irritability for the first two or three days.

In the latter stage of this fever, at which time the most common symptoms are great weakness, restlessness, anxiety and impaired sensibility, nothing seemed to retard the fatal event so effectually, as a volatile aromatic julep, with the addition of laudanum and the essence of peppermint and the moderate use of claret or port wine.

EVERY case where the skin became yellow, and the countenance appeared cadaverous, has hitherto proved mortal.

Is not this the same as the synochus of Dr. Cullen? The treatment which has succeeded best seems to indicate that it is.

WHEN treating of the synochus, Dr. Cullen expresses himself in the following terms:

“ In

“ In the synochus a *violent* reaction and phlogistic diathesis appear, and prevail during some part of the course of the disease; while at the same time, these circumstances do not constitute the principal part of the disease, nor are to be expected to continue during the whole course of it; and it is well known, that, in many cases, the state of violent reaction is to be succeeded sooner or later, by a state of debility, from the excess of which the danger of the disease is chiefly to arise. It is therefore necessary, that in many cases blood letting is to be avoided; and even although during the inflammatory state of the disease, it may be proper, it will be necessary to take care that the evacuation be not so large as to increase the state of debility which is to follow.”

THE fever however which I have been describing, differs from the synochus of Doctor Cullen, in the time of its duration, as well as in the violence of its symptoms. “ It is rare,” says that great reformer of medicine, “ in this
climate

climate [Scotland] that cases either of *typhus* or *synochus*, terminate before the eleventh day; and when they do terminate on this day, it is for the most part fatally.

WHEN they are protracted beyond this time, I have very constantly found that their terminations were upon the 14th, 17th, or 20th day."

Cullen's first lines, vol. 1st.

SINCE the above was written, I have taken particular pains to investigate the origin of the fever, described in the preceding pages, and have discovered that the first case of it occurred at Richard Dennie's, who kept a lodging-house in Waterstreet, nearly opposite to Dr. Hodge's. A man and his wife of the name of Parkinson, passengers in the brig *Ann and Mary*, from Dublin, took lodgings there the latter end of

D

June.

June. They had one Englishman lodging with them at that time. Two young Frenchmen afterwards took lodgings in the same house. The rest of the family consisted of Richard Parkinson, his wife and two daughters. On the 3d. of August Dr. Cathrall visited Mrs. Parkinson, labouring under a highly malignant fever, as will appear by the annexed letter.

ON the 4th of the same month, Dr. Phisick, at the request of the overseers, visited the Englishman, who died suddenly the same night. The next day he opened the body, but could discover nothing except some derangement in the colon and vesica fellis, that could lead to a discovery of the nature of the disease or the cause of his death. On opening his head, he found the vessels of the brain uncommonly distended, and turgid with blood.

MRS. PARKINSON died on the 7th of August. One of the French lads was taken
ill

ill soon after Mrs. Parkinson—was attended by a French physician who lodged at Mrs. Sage's in Front-street : but I was not able to ascertain the day of his death.

SOON after the death of the French lad, Mr. Dennie was attacked by the fever, and his wife two days after. They were both buried the same day—He survived the attack seven, and she only five days.

MRS. PARKINSON's husband, and Mr. Dennie's two daughters escaped the infection, but the other French lad who took fresh lodgings higher up Water-street, died a few days after.

ONE of the young women from whom I received the most circumstantial part of the above account, now resides at Dr. Hodge's who has humanely afforded her and her sister an asylum in their distress.

THE most material parts of the above circumstances have also been confirmed by the Rev. Mr. Keating.

Two of the family next door to the lodging-house, died soon after of the same complaint. Dr. Hodge's maid-servant, a young woman from the country, and his little daughter, have also died since of the same complaint; and a number of others in the same neighbourhood.

IT is also said, but for this I cannot vouch, that a carpenter in Kensington, who assisted in breaking open the sheathing of the cabin of Mr. Steinmetz's brig, which had 117 French West-Indians on board, was soon after attacked with feverish symptoms; of which he died in a few days; and that several Danish sailors have been affected by the same disease at Kensington.

THAT the disease made its first appearance in the house already mentioned, is clearly
estab-

established; but whether it was imported and introduced there by the Irish family, or by the French lads, or was generated there, I have not been able to collect a sufficiency of evidence to determine.

September 3d. 1793.

Copy of a Letter from Dr. Cathrall,

In compliance with your request, I now send you the case of Mrs. P. transcribed from my Journal.

AUGUST 3d. 1793, Mrs. P. was taken chilly, succeeded by violent pain in the head and back, increase of heat, much thirst, &c. On the morning of the 4th I saw her, found her complaining of great sickness at stomach, with frequent vomiting, tightness across the lower part of the chest, attended with heavy
sighing,

fighting, bowels costive, tongue dry and black, particularly in the middle, and brown towards the edges; heat and thirst much augmented, pulse quick and feeble, urine small in quantity, and of a high colour.—5th. Rested ill last night; symptoms much as yesterday, excepting, has had several very offensive stools.—6th. Has been very delirious during the night, but rational at present; still vomits every substance received into the stomach; a number of crimson coloured spots appeared on her neck, breast, and arms; has frequent stools which are very putrid; tongue much cleaner than before; pulse slower; heat diminished; pain in the head and back very considerable—7th. Passed a very restless night, though not delirious; tongue black; spots of a livid colour, attended with slight yellowness of the skin; eyes heavy, with dimness of vision; complains of much soreness of the throat, and difficulty in swallowing. Diarrhoea and vomiting continue;

is now delirious, accompanied with singultus, &c. Died at 11 at night.

I am, &c.

J. CATHRAL.

IT appears from authentic documents, that the same kind of fever as the one which I have described in the preceding pages, has been prevalent in Philadelphia at two different periods. The first, A. D. 1740; supposed to have been introduced by means of a quantity of wearing apparel brought in a trunk from Barbadoes, belonging to a gentleman who died of it in that Island.

THE second time of its appearance was A. D. 1762, introduced by a mariner, who arrived sick with it from the Havanna, and communicated it to the family where he lodged; from whence it spread rapidly from
house

house to house as families had intercourse with one another.

ACCORDING to the notes of Dr. Redman, the worthy President of the Philadelphia College of Physicians (who has favoured me with the privilege of making use of them) it made its appearance the latter end of August of the year last mentioned. About the 20th or 25th of September, its progress seems to have arrived to its height. From the 27th it gradually declined, so that by the 10th of October, instead of 18 or 20 patients of a day, which Dr. Redman had before attended in it, he had now only two or three.

THE fever at that period was circumscribed between Pine-street, northerly, and three or four squares from thence southerly, and extended from Water-street, to Third or Fourth street westerly. Its first and greatest ravages were about the New Market, which lay near the source of the contagion. The fever as it appeared at that time, is thus described

scribed by Dr. Redman in a communication just presented to, and read in the College of Physicians.

“THE patients were generally seized with a sudden and severe pain in the head and eye-balls, which frequently appeared a little inflamed, or had a reddish cast, great pain in the back and limbs, and much dejection of spirits. A sick stomach generally attended, but in various degrees of violence, with frequent vomiting, more or less of green or yellowbile, and was distinguished from the cholera morbus by not having a purging with it. There was also a kind of cardialgia, or burning heat about the scrobiculus cordis, with great oppression; but if I remember right, not much pain like a colic; nor do I recollect any chill *generally* preceding the above symptoms—however, it might be with some. The skin was dry with a disagreeable burning heat in it, sensible to the hand of others. The tongue was not very dry at first, but rather

E

moist,

moist, and covered with whitish mucus. The pulse was not generally either full or tense, but very quick in the beginning, by which the degree of fever was chiefly designated. Yet in some persons previously very plethoric from high living and other circumstances, some fullness without tension was observed in the pulse in the first stage; after which in many, the pulse became so moderate in every respect, as to be scarcely distinguishable from that of a person in health. Though very restless and often tossing about, or changing position from oppression at the præcordia, I think they were but seldom very delirious; but if the disease continued to increase, and resist the power of medicines, they rather grew comatose, which was a bad symptom, and generally continued till death, unless, the black vomiting came on and occasionally roused them. But even those who were comatose, when roused appeared quite sensible, though not capable of preserving a regular connection of ideas on any one subject for any length of time. They

soon

soon became yellow in their eyes and skin universally, which became extreme in some before, and in almost all after death: and in those that recovered, it continued during the whole convalescent state, and in some, a great part of the cuticle peeled off.

“ WHEN the disease terminated fatally, it was generally on the 4th, 5th or 6th day; some few later; but after the 7th day, or even sooner if the pulse became much calmer and slower without a *coma*, and the patient inclined to a natural easy sleep, though short, with a moist skin and tongue, &c. we were encouraged to hope, and promise much, and generally succeeded in our prognostications,” &c.

THE method of treatment adopted by the most sagacious physicians at that time in the city, was nearly similar to that recommended in the text of the preceding pages; except
that

that they were more reserved in the use of emetics, but more liberal in that of saline cathartics. They never employed blisters except when the patients were affected with coma, and then seldom with much benefit.

Sept. 4, 1793.

2

T H E E N D.



Med. Hist
WZ
270
C976d
1793
C.1

